# **MINUTES**

# CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE MEETING OF MAY 4, 1995

The second meeting of the CTCDC in 1995 was held in the City Hall Council Chambers at 77 Fair Drive, in the city of Costa Mesa, on Thursday, May 4, 1995.

Vice Chairman Wayne Tanda opened the meeting at 9:05 a.m. with the introduction of members and guests. The Chairman thanked the city of Costa Mesa for its hospitality and the special efforts of Mr. Peter Naghavi on behalf of the Committee.

The following members, alternates, and guests were in attendance:

ATTENDEES Members (Voting)	ORGANIZATION	TELEPHONE
Wayne Tanda Vice Chairman	League of California Cities, City of San Jose	(408) 277-4304
Bruce Carter	County Supervisors Association of California, Shasta County	(916) 225-5661
Capt. Don Follett	California Highway Patrol, Sacramento	(916) 657-7222
Gary Foxen	Auto Club of Southern California, Los Angeles	(213) 741-4429
Jack Kletzman	California Department of Transportation, Sacramento	(916) 654-4715
Hal Rosenberg	League of California Cities, City of Chula Vista	(619) 691-5116
John Wallo	County Supervisors Association of California, San Luis Obispo County	(805) 781-4466
Jack Kletzman Secretary	California Department of Transportation, Sacramento	(916) 654-4715

# CTCDC MINUTES May 4, 1995

ATTENDEES	ORGANIZATION	TELEPHONE
Cyrus Abhar	County of Sacramento	(916) 440- 6291
George Allen	City of Garden Grove	(714) 741-5190
Doug Anderson	City of Tustin	(714) 573-3150
Tony Aquino	City of Garden Grove	(714) 741-5193
Bob Brow	County of Sacramento	(916) 366- 2227
Dennis Dunn	County of Sacramento	(916) 366- 2237
Jerry Fitch	County of Sacramento	(916) 366- 2237
Charles Felix	City of San Jose	(408) 277-3070
Shahir Gobri	Auto Club of Southern California	(213) 741-4429
Ken Hakker	CAPO Unified School District	(714) 489-7276
Dennis Johnson	City of Costa Mesa	(714) 754-5180
Rob Johnson	City of Costa Mesa	(714) 754-5017
David Jorge	City of Costa Mesa	(714) 754-5183
Conrad Lapinski	City of Irvine	(714) 724-7356
Jim Larsen	County of Tulare	(209) 733-6291
Lujuanna Lopez	CHP, Sacramento	((916) 657-7222
Ron Llouter	Crosswalker	(209) 653-1585
Doug Maas	County of Sacramento	(916) 366- 2237
Chuck Perry	Caltrans, Sacramento	(916) 654-5039
Bob Preston	County of Alameda	(510) 670-5577
Dave Royer	City of Los Angeles	(213) 485-3548
Chris Ramstead	County of Los Angeles	(818) 458-5908
Russ Yanker	City of Costa Mesa	(714) 842-1782
Robert Zeigler	Marin County	(415) 499-6336

#### **MEMBERSHIP**

Mr. Hal Rosenberg substituted for Mr. Dick Folkers on behalf of the League of California Cities.

#### **MINUTES**

<u>MOTION:</u> By Gary Foxen, second by Bruce Carter, to adopt the minutes of the Santa Rosa meeting held on October 20, 1994. Motion carried 7-0.

#### **ELECTION OF OFFICERS**

Vice Chairman Tanda called for the election of officers as required in the bylaws. Jack Kletzman explained that officers of the Committee traditionally serve for two years, this being the second year.

MOTION: By Jack Kletzman, second by Bruce Carter, to reelect the Mr. Folkers as chairman and Mr. Tanda as vice-chairman. Motion carried 7-0.

# 91-9 CYCLIST LOOP ACTIVATION MARKING

Jack Kletzman recalled that the Committee had approved the logo for loop activation marking and requested guidelines. The California Bicycle Advisory Committee and Caltrans Traffic Operations collaborated to develop the draft guidelines which were presented to the Committee.

[The version of the guidelines presented to the Committee was later than the one disseminated in the Agenda. They now read: "The Loop Detector Logo may be used to show a bicyclist where to stop in a bike lane or traffic lane to activate a traffic signal at an intersection. The logo should be applied to the pavement over a loop detector at the optimum location for the loop to detect a bicycle. Because bicycles can be difficult to detect, care must be taken to insure that the location, indicated by the loop detector marking, actuates the signal. It is recommended that at least one of the loop detectors have a Type D configuration as shown on Standard Plan ES5B." ]

#### 91-9 CYCLIST LOOP ACTIVATION MARKING (continued.)

Bruce Carter was concerned that the guidelines required a Type D detector. Kletzman explained that this was recommended by the Electrical Section of Caltrans. A loop with an internal wire is needed to detect a bicycle. Both the use of the logo and the detector are a "may" condition.

<u>MOTION:</u> By John Wallo, second by Jack Kletzman, to recommend adopting the proposed guidelines for the cyclist loop activation marking.

AMENDMENT: By Gary Foxen, second by Hal Rosenberg, to revise a portion of the guidelines to read, "The loop detector logo may be used at a signalized intersection to show a bicyclist where to stop at a bike lane or traffic lane to activate the signal." Amendment and motion carried 6-1.

**ACTION:** Item completed.

#### 92-4 TRAFFIC SIGNAL DIMMING

Charles Felix of the city of San Jose recalled that in 1992, the city, under the auspices of the Committee, began to test both LED indications and traffic signal dimming. The city then requested, and was granted, an extension of the dimming portion of the test for an additional 350 intersections. Because of problems identified with LED technology at that time, there was no interest in expanding the LED portion of the test.

It now appears that many of the initial problems in LED technology have been resolved by improvements in LED design. The city is therefore requesting to test LED indications at an additional 300 intersections in San Jose. The city wishes to secure approval of the Committee prior to applying for various sources of funding. Felix is aware of the LED testing done by Caltrans in Fresno and the concern for possible degradation of brightness. He said they intend to monitor the results of the Caltrans test before implementing the expanded test.

Gary Foxen observed that there is a great deal of money to be saved by use of LED technology, but expressed concern about the possible degradation of brightness reported by Caltrans. Foxen pointed out that there are many local agencies using LEDs without the benefit of experimentation approval from the CTCDC. Since the LEDs meet ITE standards, he asked if the Committee should grant approval in order to protect local agencies. His position was supported by Hal Rosenberg, who reported a similar situation in the San Deigo area.

Chuck Perry from Caltrans reported that the Fresno test consists of 140 intersections. The LED devices at one of the intersections had been monitored every six months. The unit was brought back to Sacramento to test against a new unit of the same type. After six months a 23% degradation in light output was measured. After one year there was a 17% degradation. After eighteen months there was a 49% degradation. Perry also noted in a national study, with a 100% cycle (continuously on), under a stress environment (such as a traffic signal,) LEDs were reduced to 20% of their initial light output.

Chuck Perry told the Committee that one of the problems is that some LED traffic signal indications barely meet the ITE standards when they are initially installed. No minimum standard has yet been established to determine when an indication needs to be replaced because of insufficient brightness. There is a two year study by the NCHRP that will establish minimum traffic indication light levels for all light sources. This study has not been completed. Caltrans expects to obtain a device that will allow brightness measurement in the field. This will enable Caltrans to check more than one unit and provide more data. Caltrans has not approved LEDs as a traffic control device. Perry believes that LEDs are an advancing technology which will provide large payoffs in the future, but we are not yet there.

Harold Rosenberg expressed concern about cities spending a lot of money for LED conversion that may not work. He asked about duplication in effort by San Jose and Caltrans. Charles Felix pointed out that because of the rapidly changing LED technology, the devices tested by San Jose in 1992 are different than the devices tested by Caltrans in Fresno in 1993, and would be different in the proposed San Jose tests scheduled for 1995. Both Felix and Perry stressed the importance of continued testing until these major problems are resolved.

Gary Foxen asked if it were wise to convert 300 intersections until the question of degradation has been resolved. Chuck Perry believes that at some future time LEDs will have acceptable degredation levels, but the units now in the field may have a problem. Caltrans does not oppose the city's testing but suggested close monitoring to avoid problems. The essential point is to establish operating levels which maintain sufficient brightness for public safety. Charles Felix concurred saying the only existing standards is an ITE standard at the time the device is installed. The California standard, taken from ITE, is in Section 86 of the State's Standard Specifications, but this specification says nothing about a minimum operational level.

John Wallo asked what further would be learned from the proposed 300 intersections or those converted intersections that are now in existence. Charles Felix responded that 300 is the maximum number that could be funded. The actual number installed would depend on results from the Caltrans test, whether a larger Caltrans test sample shows similar degradation, and advances made in the new LEDs. Wallo asked why additional intersections were needed. Charles Felix responded that in the original LED test consisted of only seven intersections and in order to get statistically significant results, a larger population is needed. He noted that San Jose has approximately 650 total intersections, of which a maximum of 307 would be converted. San Jose's legal staff supports the project, as long as the city works under permission granted by the CTCDC.

Wayne Tanda told the Committee that San Jose is considering a contract that would pay for LED conversion from the energy cost savings. A warrantee would be included in the specifications, through an insurance company, that would recoup the city's cost, should substantial degradation preclude any savings. The focus is on technological advances in the last twelve months which, the city believes, addresses the earlier shortcomings now being documented by Caltrans.

John Wallo expressed concern about local agencies exposing themselves to legal liability by experimenting with these devices without obtaining permission from the CTCDC. Wayne Tanda said that he and Dick Folkers (representatives of LOCC) were working to expand the number of cities receiving information from the CTCDC.

Wayne Tanda, as chairman for the Traffic Engineering Council of ITE, said he has set up a committee to develop performance and purchase specifications for LEDs. He told the Committee that the LED of eighteen months ago has been replaced with a superior LED which has supposedly addresses the degradation problem. Tanda agreed that some standard is needed for LED degradation. LEDs naturally degrade, hopefully over decades, rather than over a period of months. The point at which LEDs drop below an acceptable level is being examined. The ITE committee hopes to develop draft specifications by August 1995, with final adoption sometime in 1996. ITE is also considering approving labs that would certify LED manufacturers. There is a need to insure that lab certifications are acceptable.

Gary Foxen asked Charley Felix if San Jose had done any degradation studies on the units already installed. Felix responded that the initial units installed behaved more like an incandescent bulb than an LED device. Gradual degradation wasn't a limiting factor. Indications are built up out of hundreds of LEDs. Old designs were constructed so that when any LED failed, a whole string of LEDs went out. Newer designs are constructed so that when one LED fails, the indication continues to function.

Wayne Tanda pointed out that the original San Jose experiment consisted of two independent tests. One for dimming and one for LED conversion. It was never intended that LEDs should be dimmed. Gary Foxen pointed out that signal maintenance is not being kept up as it had in the past because of financial constraints. He fears this is causing a greater frequency of signal indication failure. He is also concerned that any loss of brightness problem is more acutely felt by the elderly.

Chuck Perry said that NCHRP had approved a \$350,000 study. The study is for the development of brightness standards for traffic signal indications, independent of light source. Perry expects the contract to be awarded in the fall. Normally the contract is for a two year period.

Wayne Tanda said that a concern expressed at the ITE meeting was that a great many local agencies were pursuing this technology. If government delays two years for a study, there will be a great deal of misuse and wasted effort. ITE is making a concerted effort to accelerate dissemination of information about what will and won't work and what should be included in purchasing specifications.

Dave Royer said that the Committee should notify manufacturers of the status of current LED testing. The city of Los Angeles is approached regularly by representatives that think Caltrans has approved the use of LEDs because they are already using them. Royer cautioned that the CTCDC minutes may not get to the local agency traffic engineer.

Jim Larsen said that vendors, responding to local agency questions of Caltrans approval, say that Caltrans is using them in Fresno and that they have a copy of the purchase order. He too requested that local agencies be notified that LED use by Caltrans is experimental, they are not an approved traffic control device, and experimental use should be cleared through the Committee.

Dennis Dunn said that manufacturers were telling their distributors that the LED devices were being accepted and used by Caltrans, the city of San Jose, and other places. The city of Sacramento. in an effort to reduce power consumption, was approached by the Sacramento Municipal Utilities District who purchased the LEDs for the city. There are great changes in current LED technology and the device being tested by Caltrans is not the same product being sold today. It is purportedly a 3 year life versus a 10 year life. Chuck Perry said the LEDs tested by Caltrans were supposed to have a 100,000 hours of life.

Dennis Dunn recalled that at the CTCDC meeting in Santa Rosa, a speaker said new LEDs had a 10 year life expectancy, but earlier devices, due to degradation, had a 3 or 4 year life expectancy. Chuck Perry responded that expected life is a different criteria than brightness. Dunn noted that all local agencies were turning to new technology to save energy costs. Although he agrees with others, on the necessity for notifying local agencies about the status of testing, he was concerned that everything being tested is outmoded. Perry voiced some reservation with that categorization, believing that some of the representatives statements can be misleading. Perry said that the LED technology is progressing, experimentation should be encouraged, and eventually it will be approved.

John Wallo suggested that the Committee send out a letter to the manufacturers and distributors to relate the progress of testing and some of the concerns the Committee has with respect to selling LED devices to local agencies. Jack Kletzman objected saying that according to the bylaws, control of manufacturing isn't within the purview of the CTCDC. Wayne Tanda said he felt it would be appropriate because the bylaws encourage the dissemination of information relevant to standards and appropriate traffic control devices in California. Bruce Carter pointed out that a lot of research would be needed to determine the current state of the art . Wallo said that he merely wants to notify manufacturers and distributors that LEDs have not been approved for use in California. The use of LEDs had only been approved for use, on an experimental basis, for the city of San Jose and Caltrans in Fresno.

MOTION: By John Wallo, second by Hal Rosenberg, that the Committee send out a letter to manufacturers and distributors relating some of the concerns the Committee has with respect to selling LED devices to local agencies.

<u>AMENDMENT:</u> By Wayne Tanda, second by John Wallo that a separate mailing go to all local jurisdictions in the state as well. Motion and amendment carried 6-1.

George Allen said that at the last LOCC meeting, his City Manager came back with a report on LEDs, and asked for an analysis. Allen, unaware of the status of LEDs, intended to recommend going into the program. He said that people making the presentation to members of the LOCC, represented that LEDs had been approved. Allen now intends to recommend delaying the project, subject to the LEDs being approved. In addition to traffic engineers and management, he suggested that the LOCC be involved. Harold Rosenburg suggested including utility companies.

Chuck Perry said that Caltrans had just discovered the large degradation within the last two weeks. Although only one unit has been tested, the implication is sufficiently important to alert everyone. Perry said that further testing is imminent, pending the delivery of new test equipment. He estimated that testing would be completed within three months.

Hal Rosenberg recommended that safeguards be built into the devices so that they would shut down when reaching a minimum level of brightness. He feels it would be unworkable to continually test each device to insure its functioning properly. Wayne Tanda said that ITE was looking at some indicator, such as a quivering of one or more lamps, to show a minimum level of brightness.. The problem is that, except for an incandescent bulb prior to installation, no such minimum standard has been developed. He feels there should be a minimum standard for all types of illumination.

CTCDC MINUTES May 4, 1995

**92-4 TRAFFIC SIGNAL DIMMING** (continued.)

Bruce Carter asked if the notice should go to the ITE magazine. Wayne Tanda responded that San Jose intends to put something in the Western ITE Journal.

Chris Ramstead observed that there were two topics, dimming and LEDs, discussed in this item. He feels that the dimming standards might more readily established and suggested that Item 92-4 be split into two separate items. John Wallo supported the suggestion. Wayne Tanda recalled that San Jose had originally brought both proposals as a means of saving energy costs. Since that time each facet has taken a life of its own and Tanda agreed with the suggestion.

Don Follett suggested that the Chuck Perry and Charles Felix get together with the new testing device and provide the Committee with additional information about the brightness degradation. John Wallo agreed. Wayne Tanda suggested that the difference between the units being tested should also be delineated for the Committee.

MOTION: By Gary Foxen, second by Bruce Carter, that the city of San Jose's request for expansion of the LED experiment be deferred until the next meeting. Motion carried 7-0.

<u>ACTION:</u> Item continued. Item to be devided into 92-4A Traffic Signal Dimming and 92-4B L. E. D Study, City of San Jose. Letter describing the current status of LEDs to be disseminated.

92-18 GOLF CART SYMBOL SIGNS

Dick Folkers was unable to attend and Wayne Tanda continued the item.

ACTION: Item continued.

## 93-14 SPEED CONTROL SIGN, EXPERIMENTAL REQUEST

Doug Anderson requested that the city of Tustin be allowed to experiment with the speed control sign. John Wallo objected to the sign. He reasons that the R2 and SPEED CHECKED BY RADAR signs are sufficient. The proposed sign would merely be another sign, and motorists aren't reading existing signs. Wallo feels we are putting up too many signs without getting the message across. He asked what the city thought the benefit of this sign would be. Doug Anderson agreed with this assessment, but hoped that this sign would alter the behavior of motorists. The city is not advocating adoption of the sign, they just want to participate in the experimental program and provide the Committee with an additional test case to evaluate the sign.

Bruce Carter concurred with Wallo's assessment, but noted that the Committee had permitted the city of Cypress to test the sign. Carter said that he had no problem with allowing the city of Tustin to be included in the experiment, but he doubted that the sign would work. Motorists know what the speed limit is and choose to ignore it. The only way to stop speeding is enforcement.

Wayne Tanda feels comfortable with the evaluation program devised by the consultant, Jerry Crabill. He thinks it is reasonable to expand the study to include the city of Tustin so that additional data can be gathered.

Jack Kletzman pointed out that there was also a request from the city of Monrovia. No representative from the city of Monrovia was present. Wayne Tanda asked if there was a common denominator between the three cities. Doug Anderson responded that Jerry Crabill is the consulting traffic engineer for the cities of Monrovia and Yorba Linda. His relationship to the city of Cypress is unknown. Although his offices are in the city of Tustin, he does not consult for that city. Crabill has offered his services to the city of Tustin, on a volunteer basis, but any work on the project would be under the direction of the Director of Public Works. Gary Foxen asked if the city of Tustin would be evaluating the data independently of the consultant. Anderson responded that Jerry Crabill would be working with the city and the evaluation would be a joint effort between the two.

#### 93-14 SPEED CONTROL SIGN, EXPERIMENTAL REQUEST (continued.)

John Wallo reiterated that the sign will not make the problem go away. He feels only vigorous enforcement, education, and increased insurance rates will change the habits of the motoring public. Wallo also asked what the warrants for the sign would be.

Gary Foxen noted that the sign shown in the proposal was different than the sign approved by the Committee. He was concerned that the proposed sign included the word RADAR and that this would detract from the sign. He recommended the use of an educational plate. Bruce Carter suggested that since this was an experiment the city of Tustin should be free to use whatever sign they wanted and the Committee would look at the results. He noted that a lot of communities aren't going to want to spend the money to put up these new signs unless the experiment shows a significant improvement.

John Wallo asked that any test data submitted to the Committee include a description of the highway, average daily traffic, off-peak speed data, and collision information. He also recommended staying with the Cypress sign. Doug Anderson said the city would be happy to comply.

Bob Brown said that the proposed sign is a warning sign and can not replace the SPEED CHECKED BY RADAR (R48) which is a regulatory sign. Brown said that the CHP from the Sacramento area objected to the sign because it resembled a police officer pointing a gun at someone.

Chris Ramstead recommended that speed data be collected with an electronic device over a 24 hour period, rather than using a radar gun, so that all the vehicles can be tracked. Hal Rosenberg noted that originally the sign was intended for residential streets.

MOTION: By Bruce Carter, second by Don Follett, to allow the city of Tustin to participate in this experiment subject to the comments made by the Committee. Motion carried 7-0.

#### 93-14 SPEED CONTROL SIGN, EXPERIMENTAL REQUEST (continued.)

Bruce Carter suggested that a copy of the experimentation guidelines be sent to the city of Monrovia. John Wallo felt there were enough cities involved in the experiment.

MOTION: By Bruce Carter, second by John Wallo, to deny the request by the city of Monrovia to participate in this experiment based on the fact that there are enough cities. Motion carried 7-0.

ACTION: Item tabled, pending report on experimentation.

#### 94-1 BICYCLE SIGNAL TIMING

Jack Kletzman explained that the California Bicycle Advisory Committee had recommended guidelines for bicycle signal operations, using language taken from the MUTCD, for inclusion in the Traffic Manual. Caltrans Traffic Operations is opposed to this because it interferes with signal operations. He pointed out that this does not preclude those agencies who wish to, from using the MUTCD guidelines. Wayne Tanda read from the agenda "Bicycles generally can cross intersections under the same signal timing arrangement as motor vehicles. Where bicycle use is expected, extremely short change intervals should not be used and an all red clearance interval may be necessary." Gary Foxen asked that the item be held over so that Alan Wachtel could be present.

**ACTION:** Item continued.

# 94-2 STOP SIGNS, "4-WAY" SUPPLEMENTAL PLATE

John Wallo told the Committee that a legislator got a ticket in Long Beach for going through a four-way stop. The legislator discovered that intersections in Long Beach were inconsistent with respect to supplemental plates placed underneath STOP signs. The legislator then introduced a bill to make it mandatory for all agencies with multi-way intersections to have the appropriate supplemental plate.

#### 94-2 STOP SIGNS, "4-WAY" SUPPLEMENTAL PLATE (continued.)

John Wallo canvassed fourteen cities and ten counties about their policies on the supplemental plates. Wallo said that the inquiry showed there was no consistent usage of the plates. Nobody had a written policy. Apparently there have been no studies done on this issue. There was no litigation concerning the use of the plates. The majority of agencies felt they were useful. Some agencies felt the intersection operated more efficiently with supplemental plates. Some agencies and the Committee were opposed to traffic engineering by legislation. A few agencies thought that the plates were useful when converting an intersection from a two-way to a four-way stop. Wallo recommended either making supplemental plates mandatory or deleting the standard.

Bruce Carter said the Committee in the past has vacillated on its opinion of the plates and that the Traffic Manual says "should" although the Committee voted for a "may" condition.

Jack Kletzman explained that someone reading the text of the MUTCD one could reasonably conclude a "should" condition. Kletzman asked the FHWA what the MUTCD policy meant, and found they intended it as a "may" condition. Caltrans copied the FHWA text and that was how the Traffic Manual ended up with the present wording. Caltrans, agreeing with the position of the Committee, intended a "may" condition. Caltrans is changing the verbiage in the Traffic Manual to specifically say a "may" condition.

John Wallo said the use of supplemental plates is inconsistent and that is a disservice to the motorist. He feels that in the absence of any policy direction, the signs serve no purpose. Wallo proposed to make the signs mandatory or get rid of them. Bruce Carter prefers to get rid of the supplemental plates rather than make them mandatory. A "mandatory" condition would burden local agencies and force them to erect signs at inappropriate locations. He observed that if a problem were created by plates being removed, they could always be put back. Gary Foxen believes the Committee doesn't have enough information to make a decision with respect to the value of the signs. Current usage is undocumented. He fears these plates make the motorist more aggressive by suggesting that other motorists will stop. Carter said his use was limited to four-way stops, where he uses the ALL WAY supplemental plate. Hal Rosenberg voiced concern about the effect, on the motorist, of varying local agency signing policies. Wayne Tanda doesn't use these signs. He recommended against formulating a policy without good supporting data.

#### 94-2 STOP SIGNS, "4-WAY" SUPPLEMENTAL PLATE (continued.)

John Wallo liked the comment he got from an agency whose policy was to use the plates when they convert a two-way stop to a four-way stop. Wallo is concerned about agencies that have no warrant and inconsistently use these plates. He questioned the use of THREE WAY supplemental plates at a four-way intersection, to indicate one leg had no STOP sign.

The consensus of the Committee was that it would be very difficult to conduct a study which would provide insight as to the proper policy for the supplemental plates. An unidentified member of the audience said that Kansas University was conducting such a study. Conrad Lapinski spoke against the use of such plates because they are of no use. The Vehicle Code requires the motorist to stop at STOP signs and proceed when it is safe. It is irrelevant what other motorists do. Jerry Fitch fears that motorist are less cautious at four-way stops than two-way stops. He feels its important to inform motorists when there is high speed cross traffic by using the plates to distinguish between two-way stops and four-way stops. Gary Foxen suggested that the CROSS TRAFFIC DOES NOT STOP (SW1) sign is more useful for that purpose. Fitch felt the sign was too large.

Hal Rosenberg thought the resolution of our dilemma lies in the question does the ALL-WAY, TWO-WAY, or FOUR-WAY supplemental plates make the intersection safer? Bruce Carter thought the answer would be the same as given to the question, if respondents thought it was useful. The answer is very subjective and if one thought it were useful, it must be safer. John Wallo thought that if the motorist were asked what sign was at the last intersection, he would not be able to respond. New York city deliberately put up a TOPS (sic) sign. Their downstream survey indicated that nobody recognized that the sign was misspelled. Motorists stopped because they recognized the shape and color of the sign.

Gary Foxen and Jack Kletzman were opposed to making supplemental plates mandatory. Don Follette suggested that, because of the diversity of opinion concerning the proper use of these plates, the use of supplemental plates should be left to the discretion of the Traffic Engineer for the jurisdiction. Wayne Tanda pointed out that the Committee had a responsibility to attempt to standardize traffic control devices. John Wallo was concerned about special situations that required unique solutions.

CTCDC MINUTES May 4, 1995

94-2 STOP SIGNS, "4-WAY" SUPPLEMENTAL PLATE (continued.)

MOTION: By John Wallo, second by Bruce Carter, to make ALL-WAY supplemental plate mandatory and to delete THREE, and FOUR-WAY supplemental plates.

Motion failed 2-5.

MOTION: By John Wallo, second by Hal Rosenberg, to eliminate FOUR-WAY (R1-3) and ALL-WAY (R1-4) supplemental plates. Motion failed 2-5.

MOTION: By Bruce Carter, second by Gary Foxen, to delete the THREE and FOUR-WAY (R1-3) supplemental plates, and retain the ALL-WAY (R1-4) supplemental plate for use as a "may" condition where all legs have STOP signs. Motion failed 2-5.

Jack Kletzman said that because of the lack of any data and the diverse opinion expressed here it seemed doubtful that any agreement on policy could be reached. This quandary is the reason the existing policy is written as it is. John Wallo suggested contacting ITE or Cal-Poly for recommendations.

MOTION: By Jack Kletzman, second by Don Follett, to drop the issue. Motion passed 7-0.

ACTION: Item completed.

#### 94-3 STOP SIGNS AT MID BLOCK

Gary Foxen noted that a sub-committee had been formed to establish guidelines for stop signs at mid block locations. This was done in response to the 1993 passage of a law that would allow erection of mid-block stop signs by local jurisdictions. The policy had been presented to the Committee at the last meeting but the item was continued to give Committee members a chance to review the matter.

#### **94-3 STOP SIGNS AT MID BLOCK** (continued.)

Gary Foxen told the Committee that he had received the following comments concerning the proposed policy:

- Deletion of the second paragraph because this paragraph is administrative in nature.
- The word "competent" (First sheet, third paragraph, second line.) in the policy be replaced by the word "thorough."
- Adding the word "safety" (Second sheet.) to become "overhead safety lighting and flashing beacons."

Bruce Carter recommended dropping the word "competent" altogether to become "by an engineering analysis."

Gary Foxen said he was bothered by the legislation but as long as it was the law, a policy was necessary. Jack Kletzman said that Caltrans was opposed to putting these guidelines in the Traffic Manual. The Traffic Manual admonition that mid-block STOP signs should not be used for speed control is adequate. Kletzman said that Caltrans recognizes that the Vehicle Code has been changed to allow local agencies to install mid-block STOP signs, but they are concerned about rear end collisions.

Bruce Carter said the Vehicle Code [Section 22450(b)] was revised to allow local agencies to install mid-block STOP signs. Hal Rosenberg was concerned that local politics would determine the use the mid-block STOP signs. Wayne Tanda felt that the Committee is not required to recommend guidelines merely by the act of passing a new law. Tanda said the intent in developing guidelines, was not to make installation easier, but to insure installation in a responsible and uniform manner throughout the State. The concern is that, without guidelines, a political warrant would be in effect.

John Wallo asked for clarification of the definition of "mid-block" and Tanda, reading Section 22450(b), concluded that it was anywhere between the intersections. Bruce Carter received a recommendation that these mid-block STOP signs should not be erected for pedestrians, but could be put in for a large driveway that behaves much like a street. Carter interpreted the proposed third warrant to allow the placement to be anywhere.

#### 94-3 STOP SIGNS AT MID BLOCK (continued.)

John Wallo compared the mid-block location to a publicly maintained street and a driveway. Wayne Tanda said that warrants used for a publicly maintained street and a driveway are the same as for any intersection of two streets. Tanda felt that the guidelines were emulating that situation, but he acknowledged that there was a catchall in the third warrant. Bruce Carter recalled that in downtown Los Angeles the policy was to install signals at mid-block.

Dave Royer said that the City of Los Angeles warrants were based on high volume crossings and were put in to control pedestrians rather than vehicles. Tanda recalled that the Traffic Manual had warrants for pedestrians. Carter thought that STOP signs could be used instead of signals. Gary Foxen wasn't sure the new law was necessary because another provision of the Vehicle Code [Section 21360] allows local authorities to install traffic control devices to control traffic at private roads or driveways. Carter said that the new law expands that authority to areas where there is no private road or driveway.

Hal Rosenberg told the Committee that, because of a fatality, he wanted to preserve the sight distance by restricting large vehicles parking. His legal division advised him to consider a driveway as an intersection and he had the authority to erect the necessary signs. He felt, if the conditions enumerated in the proposed third warrant existed, it would be more appropriate to install signals than STOP signs. Rosenberg suggested the warrants indicate where the mid-block STOP signs should not be used. He also suggested not to adopt the guidelines, leave the Traffic Manual as it is, and allow the local traffic engineer to determine what is best.

Conrad Lapinski suggested that "should" be changed to "shall" in "Mid-block Stop signs should not be used for speed control." Wayne Tanda suggested that before the Committee spends a lot of time it vote on whether to recommend guidelines.

<u>MOTION:</u> By Jack Kletzman, second by Hal Rosenberg, it is not necessary to add guidelines to the Traffic Manual. Motion passed 4-3.

**ACTION:** Item completed.

# 94-6 TRAFFIC CONES, CHILDREN PLAYING

Jack Kletzman reminded the Committee that at the last meeting this item had been continued. Letters requested by the Committee had been sent and Kletzman asked if there were any further actions envisioned by the Committee. Gary Foxen told the audience that a Ms. Noonan, living in San Diego, had developed a traffic cone displaying the words CHILDREN PLAYING and had it manufactured for use in the street. One of the agencies in the area felt that was an unsafe precedent and asked CTCDC to examine the issue.

The Committee determined that this was an unapproved traffic control device and notified the Ms. Noonan and her distributor TOYS R US. Ms. Noonan was invited to appear before the Committee. Wayne Tanda said that he had received a response to his letter from

Ms. Noonan. She contended that the device was safe, believing that there was a disclaimer packaged with each cone. Tanda found no such disclaimer. The cones have been removed from the shelves of TOYS R US in San Jose.

<u>MOTION:</u> By Hal Rosenberg, second by John Wallo, no further action is necessary.. Motion passed 7-0.

ACTION: Item completed.

## 94-9 SIGNAL PHASE SIGN (R54)

Gary Foxen told the Committee that Harry Parker, a consultant, raised some questions about the continued use of the \_\_\_\_-WAY SIGNAL (R54) sign. In the past, 2 and 3 phase signals were the norm, but the complexity of current state of the art electronics now provides for 8 phase signals and the sign may no longer be needed. Foxen felt that new guidelines are needed.

#### 94-9 SIGNAL PHASE SIGN (R54) (continued.)

Jack Kletzman agreed that signals are more sophisticated, but the signs are intended to alert motorists that, because of another movement, they may not get the green light when they expect it, or they may get the green light and the opposing traffic will wait. It is a "may" condition and there is no requirement to use the sign. Kletzman said the sign is used with very good effect, for intersections with an oblique leg, which may not be visible to the driver. He acknowledged that the wording of the sign could be improved and will review the sign and its guidelines. Kletzman is opposed to deleting the sign because it appears needed in limited applications.

John Wallo read a letter from a Mr. Pringle, a consultant engineer, who feels that the sign is meaningless and that the majority of motorists do not understand the sign. Wallo does not see any value of the sign. Wayne Tanda noted that Dick Folkers was against elimination of the sign. Tanda suggested at the last meeting that the sign be eliminated over a period of time.

<u>MOTION:</u> By John Wallo, second by Gary Foxen, to eliminate the sign.. Motion passed 4-3. (Not sufficient plurality to take action on a traffic control device.)

John Wallo said that the sophistication of signals, the guidelines for their installation, the location of the signal heads, and the detection devices available, leads him to conclude that the sign serves no useful purpose other than at a fixed time controlled intersection. Gary Foxen said that the motorist needs to be educated to assume nothing and that they should only move when they see the green light.

Jack Kletzman said that the reality of the situation is motorists don't necessarily behave the way we would like them to. He described an intersection in Sacramento, where an east-bound off-ramp from Rte 50 exits onto a city street. When the off-ramp has the green light, cars exit the freeway at relatively high speed. This ramp is hidden from southbound (one-way) traffic on the city street. If a driver prematurely intrudes into the intersection, there could be a very serious accident.

#### 94-9 SIGNAL PHASE SIGN (R54) (continued.)

Jack Kletzman described another instance, in the Sacramento area, where one of the legs of an otherwise normal intersection, enters at a 45 angle. This 45 leg has heavy traffic, from American River College and moves through the intersection on a protected green. A motorist on one of the other legs of the intersection may expect the next green light. He doesn't get it and that could lead to a serious accident. Kletzman feels these are two excellent uses for the sign by Sacramento. San Francisco uses the sign on Ocean Avenue, where a street car turns through the intersection on a separate protected phase of the signal. A false move by a motorist expecting the green light could lead to a tragedy. Although the motorist may not understand the meaning of the sign, it does seem to reinforce the importance of their need to wait for the green light. Kletzman reiterated that Caltrans would review the sign's legend to see if it could be improved. Kletzman said that the critical message was that the motorist may not get the next green.

John Wallo contended that the motorist should already know this by the indication that he is looking at. Bruce Carter said he would vote against the motion because he thought some sign was needed for locations such as the ones described by Kletzman.

Gary Foxen agreed with Harry Parker's suggestion that if the sign is going to be retained that some policy be adopted to determine how it should be used.

<u>MOTION:</u> By Gary Foxen, second by Hal Rosenberg, to have Caltrans reexamine the signal phase sign (R54) and policy. Motion passed 6-1.

ACTION: Item continued.

#### 94-10 PEDESTRIAN SIGNAL HEAD

Jerry Fitch presented the Committee with a request, from the County of Sacramento, for experimentation approval of a count-down pedestrian signal device. Fitch played a video tape which displayed a flashing hand and a timer counting down from 25 to 0 seconds. Fitch said that a DIP switch in the signal head is used to program the seconds. Don Follett asked if there was any concern about the motorist being distracted by the timer display. Fitch responded that either the indication would be properly oriented, or a cover would be added to shield the indication from the opposing motorist. John Wallo urged an educational program to inform the public. Fitch hoped the device was self-explanatory. Part of the accompanying survey would verify this. Wallo suggested sampling the public at the Department of Motor Vehicles. Gary Foxen was concerned that displaying the remaining time, might encourage pedestrians to violate the Vehicle Code, by entering the roadway against a flashing DON'T WALK. Fitch said they do that now.

Gary Foxen noted that the proposal called for a bright green ped walking symbol and a red upraised hand in lieu of the standard lunar white and Portland orange colors. Fitch acknowledged the deviation. He said that was all the manufacturer could provide and the County preferred to proceed rather than wait for exactly what was needed. Foxen pointed out that the deviations from standard would add unnecessary variables. Fitch feels that variations in color are less meaningful than the assistance provided to pedestrians by the count down indication. Dennis Dunn said that the County would use standard colors. Foxen suggested it might be helpful to examine the study on pedestrian crossing signs, conducted several years ago, by the National Advisory Committee on Signals, before conducting a new study. John Wallo reiterated his position that nobody is educating the public. He feels that the average pedestrian does not know how many seconds it takes to cross the street.

Bruce Carter thought that the Committee was getting ahead of itself. The County was not asking for approval, merely permission to evaluate the device. Jack Kletzman doesn't feel the timer would be of much assistance and a small sign such as the one proposed in Item 95-5 may provide a better chance for success. The timer appears to add a degree of confusion. Carter responded that the experiment will make that clear.

#### **94-10 PEDESTRIAN SIGNAL HEAD** (continued.)

Jerry Fitch said that he would be willing to conduct a preliminary test at the DMV but people say one thing and react differently. He would prefer to see public reaction to the proposed device under test conditions. Fitch is not in favor of the educational plate, he has experienced trouble getting the public to look at an arrow directing pedestrians to the right side to cross the street. He prefers to work on the traffic control device itself, rather than use one traffic control device to explain another traffic control device.

Jerry Fitch said that traffic approaching on a path parallel to the crosswalk will be able to see the device. It is visible from a cone of about 20 from straight ahead. The signal goes to yellow after the ped count down goes to zero, if there is no vehicle. Don Follett asked if there were provision for small children, pedestrians without an education, or drag racing. Fitch responded that numbers are international and small children learn numbers before letters.

Hal Rosenberg requested public comprehension and reaction to additional delay be included in the survey. Rosenberg asked if there was any work being conducted at the national level. Fitch responded that he did not know of any national work being done.

Charley Felix asked if any problems were anticipated when the control of the pedestrian timing is moved from the traffic signal controller to DIP switches in the pedestrian signal heads? He also inquired how interruption from external sources, such as emergency vehicles or a management center, would be handled by this device? Jerry Fitch responded that the experiment is to demonstrate the feasibility of the concept. These conditions don't exist in the test parameters. Fitch expects the timing function could be returned to the controller, but that would be a future modification. Jim Larsen recalled that in the late 1950s an analog type timer was used in the San Fernando Valley for pedestrian timing.

Wayne Tanda felt data from the DMV would not be representative, because it is not a true population of pedestrians. He suggested obtaining information at the test site by age and language (English vs. non-English) segregation. He felt this would provide an understanding of pedestrian perception about this device.

#### 94-10 PEDESTRIAN SIGNAL HEAD (continued.)

Wayne Tanda requested that motorists also be surveyed for comprehension. He also requested a "before and after" data sample to determine motorist behavior. This behavior could be characterized by the number of cars running yellow and red signals and might indicate whether motorist speed up because of this device.

John Wallo urged the use of standard colors of lunar white and Portland orange. Don Follett suggested the County work with the North Sacramento Area CHP office for accident statistics. Gary Foxen felt the experiment would encourage pedestrians to violate the flashing red hand indication.

MOTION: By John Wallo, second by Bruce Carter, to approve the experiment, by the County of Sacramento, for a pedestrian signal head in the County of Sacramento including but not limited to the use of lunar white and Portland orange.

Motion carried 6-1.

ACTION: Item tabled, pending report on experimentation.

# 94-11 PEDESTRIAN SAFETY IN CALIFORNIA, A STATE PLAN

Jack Kletzman informed the Committee that contact had been made with the Emergency Medical Services Authority. Ms. Jill-Ann Schroeder, Chief of the Office of Research & Information Services, told him that a disclaimer had been added to the publication. Kletzman had not received the disclaimer prior the CTCDC meeting. Kletzman then asked if there were any further action desired by the Committee.

[The disclaimer has subsequently been received and reads, "The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the State of California, the National Highway Traffic Safety Administration, or the Federal Highway Administration."]

#### 94-11 PEDESTRIAN SAFETY IN CALIFORNIA, A STATE PLAN (continued.)

MOTION: By Hal Rosenberg, second by Jack Kletzman, that no further action is warranted at this time. Motion carried 7-0.

ACTION: Item completed.

#### 95-2 HIDDEN DRIVEWAY SIGN

Bob Preston presented the Committee with a symbol sign indicating a driveway and an educational plate which says HIDDEN DRIVEWAY. This sign is to warn motorists in rolling hill terrain, with short sight distance, of an intersecting hidden driveway. He requested assistance in developing guidelines for the proposed sign. Preston had considered using the standard W7A symbol sign together with an educational plate DRIVEWAY as an alternate solution.

Bruce Carter said he has the same type of road and uses the standard W7A symbol sign with a DRIVEWAY plate. Carter doubts the sign solved any problem, but it could help with liability. He assumes Preston took the W7A symbol sign and dashed the side street to show it as inferior to a normal road. Carter is against creating another sign and recommended using the W7A symbol sign with the DRIVEWAY plate. Jack Kletzman agreed with Carter in the use of a standard sign and noted that the plate could specify HIDDEN DRIVEWAY, if that were the concern.

Don Follett felt the proposed sign would be more confusing and recommended using standard signs because they are more familiar. John Wallo thought the W7, W7A sign would indicate a public road intersection and asked if the DRIVEWAY supplemental plate resolves the liability. Follett responded that anything done to clarify the sign would decrease the liability exposure. Wallo recommended the "non-reflectorized sign optional" in the DRIVEWAY spec sheet be deleted. Gary Foxen saw signs in Virginia which simply said HIDDEN DRIVEWAY. He thought the sign had value and questioned if using the sign would require all such driveways to be signed. Carter said the use of the standard sign was a "may" condition and doubted that there would be a liability problem.

#### 95-2 HIDDEN DRIVEWAY SIGN (continued.)

Jack Kletzman thought a HIDDEN DRIVEWAY plate with the W7A sign would be within the policy of the Traffic Manual. He had concerns that the proposed signs might cause rear-end accidents. John Wallo, observing that the proposal would affect private driveways, asked if property owners were going to pay for the sign. Bob Preston said that since the sign was for the protection of the property owner, the county would look to the property owner for costs. Dave Royer said that his criteria for sign installation would be to protect the motoring public and to protect his agency from liability.

John Wallo suggested that, in the future, when the Committee considers changes in signs, part of the requirements ought to be that the requester provide a complete package which should include the policy or warrants.

Wayne Tanda suggested the use of a CROSS TRAFFIC AHEAD (W70) sign. Tanda acknowledging that current policy does not provide for a hidden driveway application, feels it would be a way of describing to the motorist that there is entering traffic. Bruce Carter recalled that Caltrans had two, two-way stop intersections and were trying to convince the stopped traffic that the other direction did not stop. The sign did not work and Caltrans has gone to a four-way stop. He would not use the W70 for a rural location.

Gary Foxen felt the CROSS TRAFFIC AHEAD sign has some value where there is a long stretch of unimpeded roadway going into an area of somewhat dense development with a lot of cross traffic. He feels that the use of this sign for the hidden driveway application would dilute the W70's intended use.

<u>MOTION:</u> By Hal Rosenberg, second by Jack Kletzman, not to approve the proposed hidden driveway sign. Motion carried 7-0.

ACTION: Item completed.

#### 95-3 SAFETY CROSSWALKER

Ron Carter presented a prototype of his Crosswalker device to the Committee. He told the Committee, the Crosswalker was developed as a result of a fatality in foggy weather. The device is to be used for school crosswalks. Ron Carter believes motorist respond to flashing lights and STOP signs more readily than they do cones or paddles. In response to FHWA's concern about loose objects on the road, Ron Carter redesigned the device with two breakaway bolts that fail upon a 15 mph impact. The two parts are held together by a chain and will slide along the road if impacted by a vehicle. He said the device has been given to three schools in the Atwater area and that he had a number of endorsement letters. Ron Carter requested an endorsement from the Committee.

Ron Carter explained that the device is stored on the school premises. In the morning a crossing guard will take the device and put it out in the street. As children are crossing, the guard places the STOP sign perpendicular to traffic, turns the flashing lights on, and walks across the street with the children. Once the children have crossed the street the guard will pull the device back to the side of the road, with the sign parallel to traffic.

John Wallo recalled that in the 1950s, service clubs used to buy devices called "Safety Sallys." They had a round base and were rolled out into the middle of the intersection and they were supposed to command some respect from the traffic. The reality was these devices were hit by traffic, were rolling around the intersection, and were of little value. Wallo's experience with instructions to traffic guards is that they are not to stop traffic. Crossing guards wait for traffic to clear and then help children across the street.

John Wallo has a problem with who will be authorized to put these devices out on the road, especially if they are to be used at mid-block. Wallo observed that the device's yellow and red lights conflict. If the object is to stop traffic everything should be red. Ron Carter responded that the purpose of the lights is to bring attention to the motorist of the existence of the crosswalk during inclement weather. Ron Carter said the main problem was visibility in foggy areas. Wallo asked if there had been any crash tests to demonstrate how the unit reacts to impact. Ron Carter said they did at 5 mph, but there were no video tapes to show the Committee. He did not know what would happen at a 25 mph impact.

#### **95-3 SAFETY CROSSWALKER** (continued.)

Hal Rosenberg asked if any city was sponsoring the device and if Ron Carter was asking for permission to experiment. Ron Carter responded that the city of Merced has endorsed the device and he needed Committee approval to sell in California. Ron Carter said the plan was to use the device at all times, not necessarily to stop traffic but to slow down the traffic. Gary Foxen pointed out that a STOP sign, which is an official traffic control device, requires a full stop rather than a slowing of traffic. Don Follett said that the device, even with the chains, will become a deadly missile when the pieces separate upon impact. Follett pointed out that if the device is operating in a fog, with 30' visibility, the lights will blind the person going out in the crosswalk. Follett was also concerned that a motorist might swerve to avoid hitting the bulky device and strike pedestrians.

Gary Foxen noted that the federal manual contains a prohibition against using portable devices in the roadway. Foxen was dubious that a guard would haul that heavy piece of equipment out to the middle of the street, every time children were crossing. He reasoned that it was more likely to be positioned in the middle of the street and left there for the duration of times allotted for children to cross. This would be a violation of the MUTCD. Wayne Tanda feels the area of authority of the Committee does not extend to composite devices. Bruce Carter reminded the Committee that they took no action in a similar situation where a STOP sign and a red strobe light were combined for a paddle. The Committee reasoned that the STOP sign was standard, the red strobe light was an attention getting device, and the combination could be used without Committee action. Carter said the problems with this proposed device are that the lights are conflicting, a heavy metal object is standing by itself in the roadway, and it is not controlled by a crossing guard.

Wayne Tanda felt the manufacturer was asking for an endorsement of the product, which would be inappropriate for the Committee to do. The Committee could make a recommendation on the appropriateness of the device for use on the street. Hal Rosenberg noted that the Traffic Manual says that portable signs shall not be used on streets. Ron Carter responded that in conversations with the FHWA, he believed they would make an exception for this device and leave it to individual States to decide.

#### **95-3 SAFETY CROSSWALKER** (continued.)

An unidentified member of the audience read from Chapter 10 (Section 10-03.5) of the Traffic Manual, "Portable school signs shall not be placed within the roadway at any time." Chris Ramstead appreciated the work that went into the development of the device, but he believes it has drawbacks. It cannot be left in the center of the roadway. It is inappropriate to display the STOP sign, except when children are crossing and the temptation to do this would be substantial. The device burdens crossing guards by requiring additional tasks which are currently unnecessary. Employing the device takes away the use of the crossing guard's hands, which he now uses in a fashion similar to a traffic officer. Ramstead said their policy was for crossing guards to enter the roadway alone, stop the traffic, signal for the children to cross, wait for the children to leave the street, and then exit themselves. He believes the device will focus the guards attention away from this routine.

Wayne Tanda verified that the device could be used by students as well as crossing guards. Ron Carter told the Committee that another purpose of the sign was for construction work. Bruce Carter said that, although the device has drawbacks, it would be nice to have an attention getting device in the fog laden valley. He likes a strobe device for this purpose. Carter noted that a flagman is used in construction with a STOP/SLOW paddle to move traffic through the area. This device does not function in that manner. John Wallo felt this is an exercise in futility because current standards do not permit such a device.

<u>MOTION:</u> By Hal Rosenberg, second by John Wallo, to deny recommending this device as a traffic control device. Motion carried 7-0.

**ACTION:** Item completed.

#### 95-4 BIKE LANE SYMBOL PAVEMENT MARKING

John Wallo said there was an error in Note 2 in Figure 6-25 of the Traffic Manual. The note reads, "The use of the bicycle symbol pavement marking to supplement the word message is optional." Wallo advocates using either the bicycle symbol or the message BIKE LANE. He feels the use of both is redundant. Tanda noted that the position of the California Bicycle Advisory Committee (CBAC) was to recommend no change from the existing standard. Gary Foxen said one reason for the BIKE LANE message instead of the symbol was to be consistent with the regulatory BIKE LANE sign. Foxen said CBAC was also concerned that there might be confusion between the cyclist loop activation marking and the bike lane symbol. Wallo said there was a substantial difference in size. Wayne Tanda recalled that proponents of the cyclist loop activation markings assured the Committee that there would be no confusion between the two symbols.

Don Follett thought CBAC would be supportive of anything that would improve the safety of bicycles. He considers their opposition to the change as crucial. Jack Kletzman said that Caltrans Traffic Operations supports the CBAC position. John Wallo wanted to know if there was any elaboration from CBAC and Gary Foxen responded that it was the same points that he had already described. Wallo suggested the sign should be changed to a symbol sign. He noted that the Class III bike route sign shows a bicycle symbol. Foxen recalled that the Class III bike route sign has a supplemental plate. John Wallo saw no purpose to putting both the message and the symbol on the pavement, but was reluctant to continue this item if CBAC was opposed to it.

Wayne Tanda feels either one or the other should be used. He understands the need to use both for education, but the time has come to use the bicycle symbol. Chris Ramstead suggested that CBAC be present to explain their position.

The consensus of the Committee was to continue the item and hear from the CBAC representative.

ACTION: Item continued.

#### 95-5 PEDESTRIAN EDUCATIONAL PLATE

Gary Foxen explained that the City of Ventura has requested the Committee recommend adoption of an educational plate at signals which explains the meaning of pedestrian indications. Two signs were submitted, an original and an alternative sign. The consensus of the Committee was that the alternative sign (Figure 2 in the agenda.) was up for consideration.

Don Follett asked if there was any recommended size for the sign. Gary Foxen responded that he had no such information. John Wallo told the Committee that the island of Maui uses this idea, not as a sign, but as a decal. Wayne Tanda was concerned that any sign used in the proximity of the push button would be less than the  $6^{1}/_{2}$  feet required by American Disabilities Act. Wallo suggested a label at the push button and a sign above. Tanda said that ITE is studying the problem and the chairman of that committee told him that Canada uses the sign at the ped head. The sign is therefore at about  $6^{1}/_{2}$  feet but it is across the street. The sign must then be of sufficient size to accommodate adequate sized lettering.

Jack Kletzman prefers the verbiage in the Figure 2 sign and favors adoption. But he would like to know the size of the sign and would prefer testing as the basis of adoption. John Wallo asked if Caltrans is in favor of using a decal. Kletzman said he favors the idea of an explanation of pedestrian indications to the public.

An unidentified member of the audience said that a similar sign is commercially available but is only about  $3^{1/2}$ "x  $5^{1/2}$ " and is hard to read. He had seen such information on stickers attached to signal poles in the City of Davis. He then asked if Kletzman liked the verbiage. Kletzman responded that Caltrans likes the verbiage on Figure 2 better than Figure 1. The unidentified member of the audience then asked if the language of the sign conflicts with Caltrans pedestrian push buttons on center islands. Kletzman responded that the sign may have to be modified, there is no information concerning dimensions, but that there is a need to educate the public, the proposed messages provide a good explanation, and the concept looks solid.

#### 95-5 PEDESTRIAN EDUCATIONAL PLATE (continued.)

Hal Rosenberg was not in favor of the sign. He feels the sign is superfluous and that the public is intelligent enough to understand the indications. John Wallo felt that the requester should appear before the Committee to defend his position so that the Committee doesn't have to second guess what is meant or what is to be accomplished. Bruce Carter said that there were other agencies that provided similar information without going to the Committee. He did not feel this was a traffic control device and was unwilling to approve this device as a sign.

An unidentified member of the audience suggested that this information could be put in a utility billing to educate the public. It could be sent to schools. This information can be disseminated without making it an official sign. John Wallo recalled that in similar situations, he sent people to the senior centers and to the schools to disseminate information. A member of the audience objected, saying there are too many places to go one on one and that schools have too many requests to teach subjects outside of their curriculum. Gary Foxen suggested letting the MUCTD take the lead.

Wayne Tanda suggested that Caltrans should advise the Committee if this were something appropriate for the Traffic Manual. Tanda felt that if MUTCD developed a standard, the Committee would not want to recommend a specialized sign. Tanda suggested continuing the item to find out what Caltrans wanted to do and to confirm whether MUTCD was developing a standard. John Wallo said that he did not consider this information a traffic control device. Tanda responded that pedestrian indications are very misunderstood and if there is a plate in existence that could provide public education it should be something that is included in the Traffic Manual for informational purposes to the extent that it will be included in the federal manual.

Bruce Carter feels its very difficult to determine whether pedestrians disobey the signs because of a lack of knowledge or because of a willful disrespect for the law. He feels regardless of the traffic control device, many of the violations are deliberate and this trend is increasing. Gary Foxen reminded the Committee that it had not made a determination of whether this was considered a traffic control device.

CTCDC MINUTES May 4, 1995

95-5 PEDESTRIAN EDUCATIONAL PLATE (continued.)

MOTION: By Hal Rosenberg, second by Bruce Carter, the proposed plate is information

and not a traffic control device. Motion carried 5-2.

ACTION: Item completed.

95-6 BIKE LANE STRIPING FOR DRIVEWAYS

Jack Kletzman told the Committee that the executive secretary for CBAC asked that this

item be deleted.

MOTION: By Bruce Carter, second by Jack Kletzman, to delete the item.

Motion carried 7-0.

ACTION: Item deleted.

CTCDC MINUTES May 4, 1995

**OFF-AGENDA ITEMS** 

The consensus of the Committee was to publish the Light Rail Manual as an informational

sub-committee document with a disclaimer.

The Cogar Company demonstrated a new type of sign which lights up during the day and

night without electric current.

A draft version of the HOV Manual or portion of the Traffic Manual will be submitted to

members of the Committee.

John Wallo suggested that the Committee not consider an item until the requester appears

before the Committee. Unless the requester is present, the Committee ends up second

guessing what is needed and the reasons for the need. Wallo suggested CTCDC meetings

be scheduled in coordination with other meetings regularly attended by Committee

members and members of the audience, such as the Transportation Symposium three day

conference. This would be more cost effective.

ADJOURNMENT

MOTION: By Jack Kletzman, second by Don Follett for adjournment.

Motion carried 7-0. The meeting was adjourned at 3:03 pm.